

Figure 1 shows inverted images of the wells of a microtiter plate.

EuMac		Abbreviation	% EtOH	% H ₂ O	Integrated Luminescence
-	+				
		A TTFA-25EtOH	25	75	10,667
		B TTFA-50EtOH	50	50	8,881
		C TTFA-75EtOH	75	25	7,306
		D TTFA-100EtOH	100	0	596
		E Gd(III)-TTFA-25EtOH	25	75	27,526
		F Gd(III)-TTFA-50EtOH	50	50	31,258
		G Gd(III)-TTFA-75EtOH	75	25	27,534
		H Gd(III)-TTFA-100EtOH	100	0	11,943
		I Gd(TTFA) ₃ -28EtOH	28	72	24,409
		J Gd(TTFA) ₃ -58EtOH	58	42	33,409
		K Gd(TTFA) ₃ -75EtOH	75	25	32,588
		L Gd(TTFA) ₃ -100EtOH	100	0	31,055
		M TTFA 1.45 mM EtOH			*Old solution
		N Gd(TTFA) ₃ 1.2 mM EtOH			*Old solution
		O LEL Emulsion			36,497
		P LEL Emulsion			36,845

Figure 2 shows inverted images of the wells of a microtiter plate.

*These solutions had been kept at room temperature, which resulted in their producing questionable results.






EuMac		Well	Abbreviation	Material	Solvent	Mean EuMac -Mean Neg. Cntrl.
-	+					
		A	LEL emulsion	LEL emulsion	H ₂ O	190
		B	Gd(III)-H ₂ O	Gd(III)	H ₂ O	7.6
		C	Gd(III)-MeOH	Gd(III)	MeOH	0.6
		D	Gd(III)-Isopropanol	Gd(III)	Isopropanol	1.3
		E	TTFA-H ₂ O	TTFA	H ₂ O	14.8
		F	TTFA-MeOH	TTFA	MeOH	16.8
		G	TTFA-Isopropanol	TTFA	Isopropanol	11.7
		H	Gd(III)-TTFA-H ₂ O	Gd(III) + TTFA	H ₂ O	91
		I	Gd(III)-TTFA-MeOH	Gd(III) + TTFA	MeOH	126
		J	Gd(III)-TTFA-Isopropanol	Gd(III) + TTFA	Isopropanol	8.5
		K	Gd(TTFA) ₃ -H ₂ O	Gd(TTFA) ₃	H ₂ O	67
		L	Gd(TTFA) ₃ -MeOH	Gd(TTFA) ₃	MeOH	152
		M	Gd(TTFA) ₃ -Isopropanol	Gd(TTFA) ₃	Isopropanol	25

Figure 3 shows inverted images of the wells of a microtiter plate.

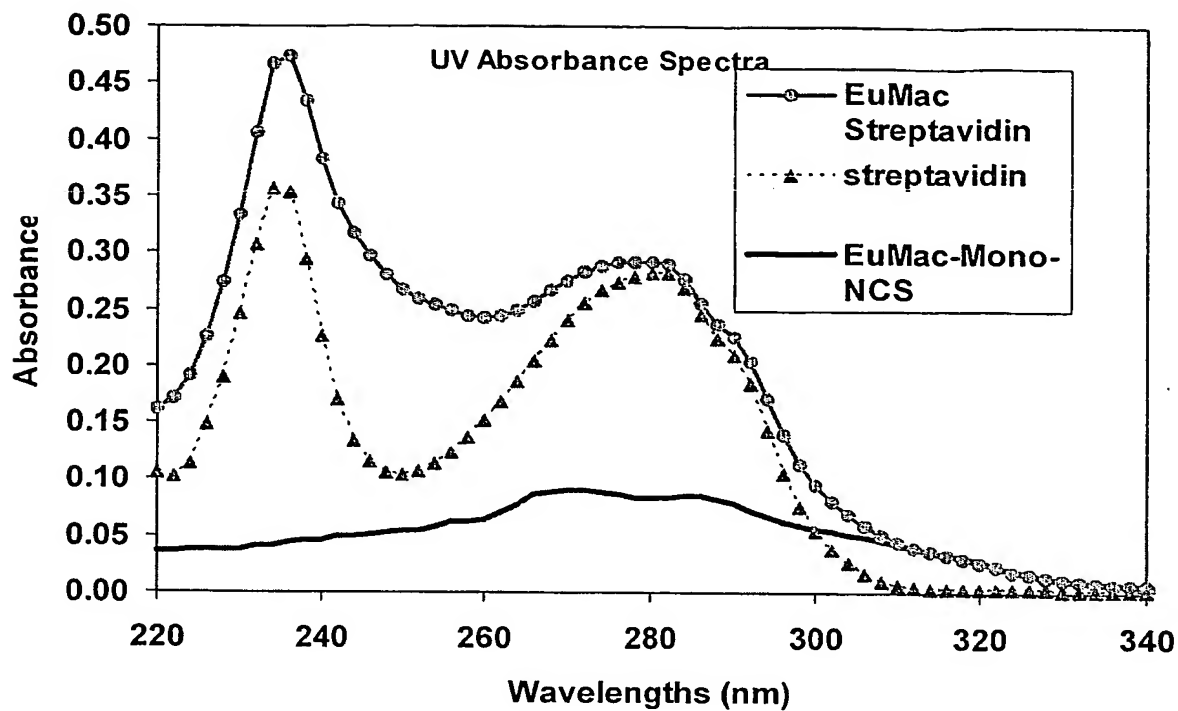


Figure 4 is a graphical presentation of the ultraviolet absorption spectra of the EuMac-mono-NCS, the EuMac coupled to streptavidin, and streptavidin.

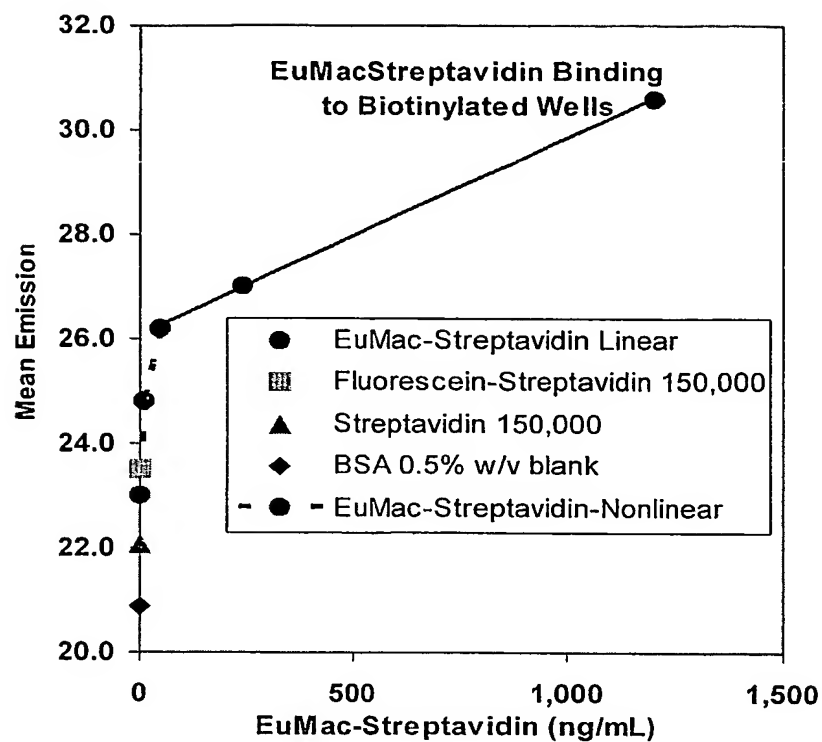


Figure 5 is a graph of the relative emission intensity versus the concentration of streptavidin added to the biotinylated well.

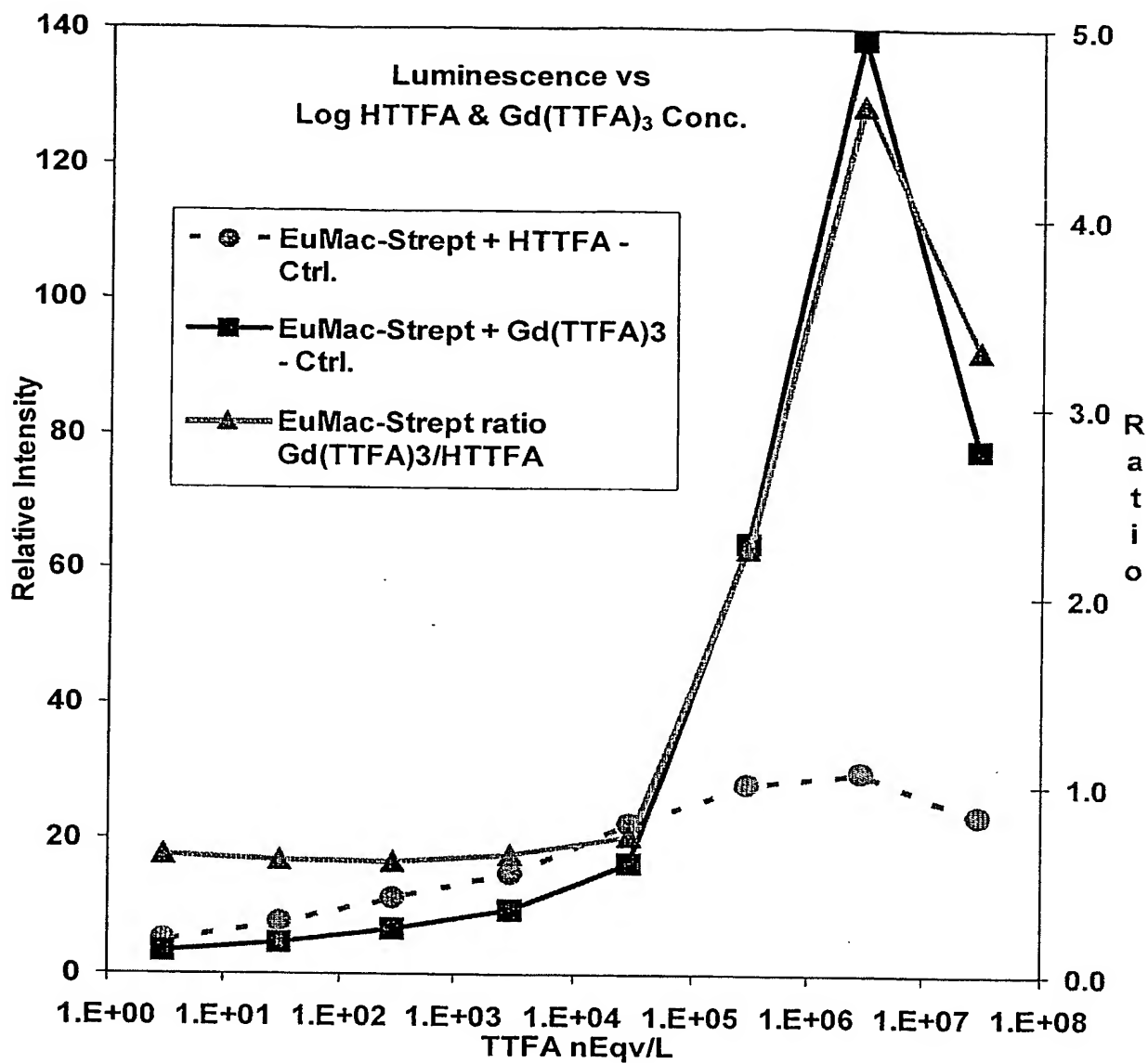


Figure 6 is a plot the concentrations of Gd(TTFA)₃ and HTTFA vs. relative luminescence.

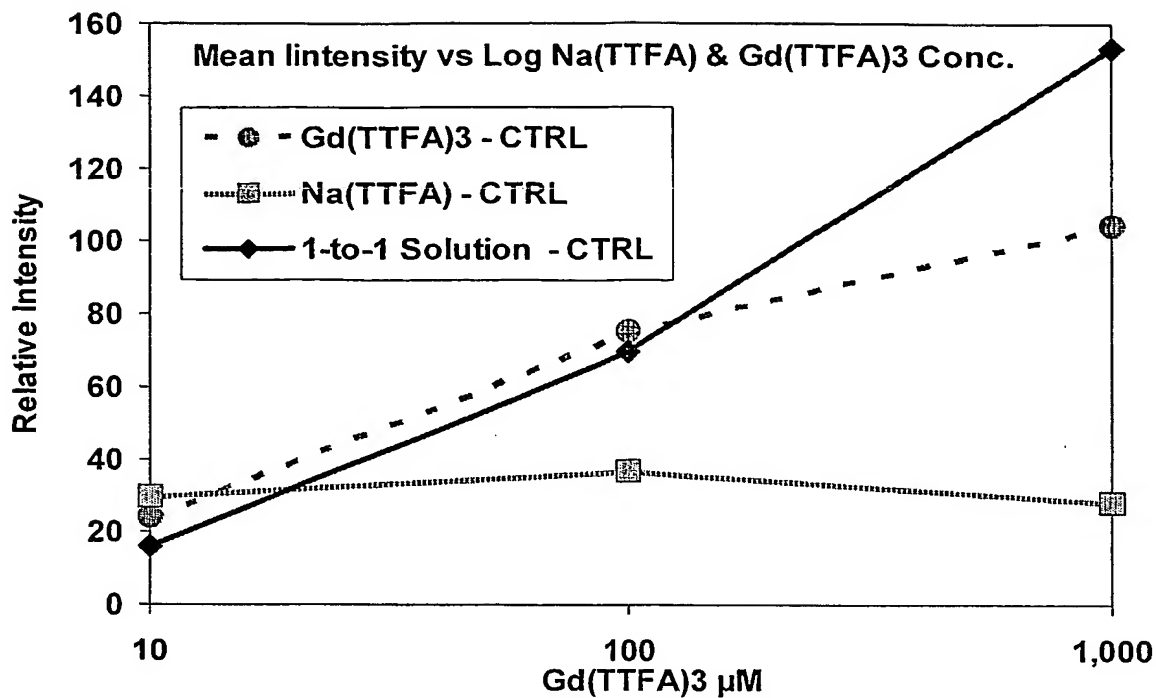


Figure 7 is a plot of the concentrations of Gd(TTFA)₃, Na(TTFA), and their one-to-one mixture vs. relative luminescence.

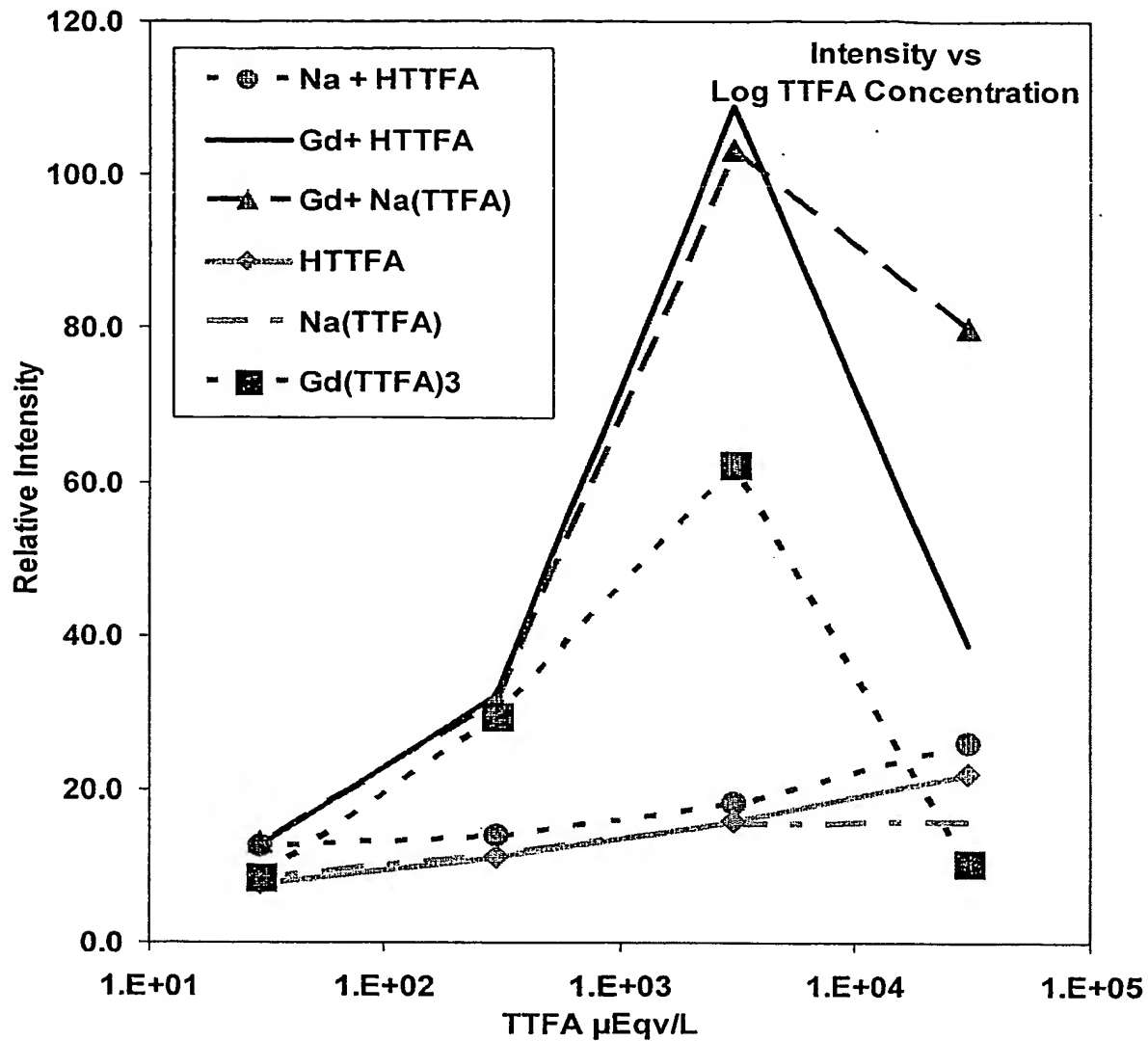


Figure 8 is a plot of the concentrations of $\text{Gd}(\text{TTFA})_3$, $\text{Na}(\text{TTFA})$, HTTFA , and their mixtures vs. relative luminescence.

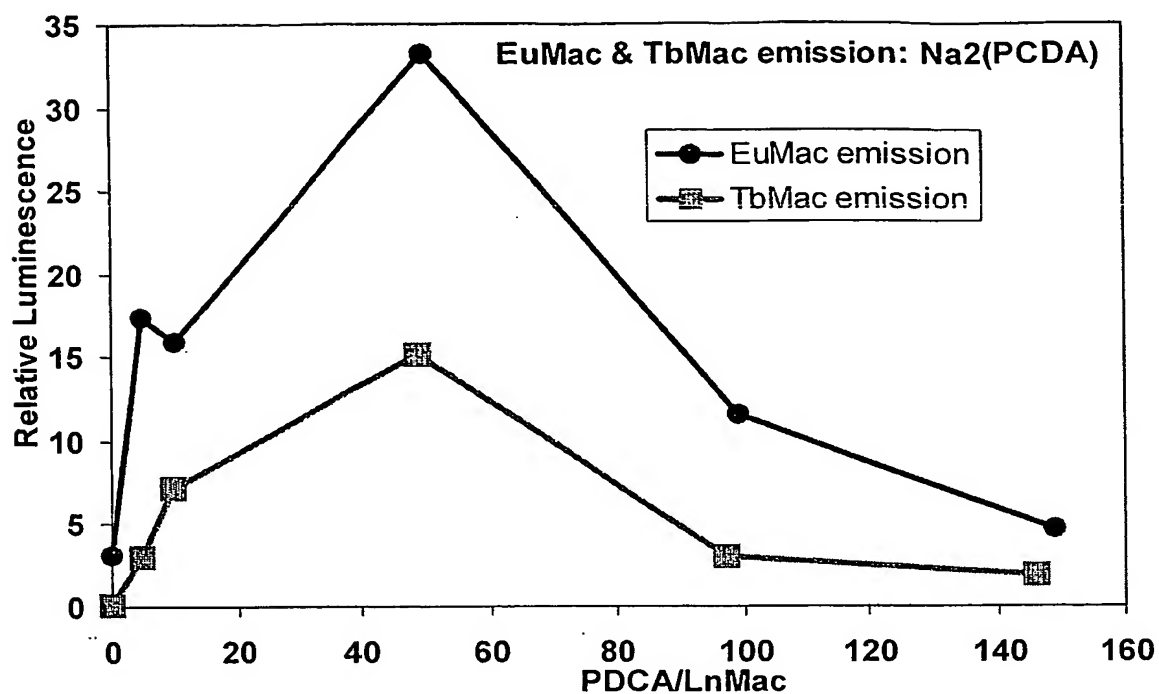


Figure 9a is a graph showing the effect of differing concentrations of Na₂(PDCA) on the luminescence of two different lanthanide macrocycles..

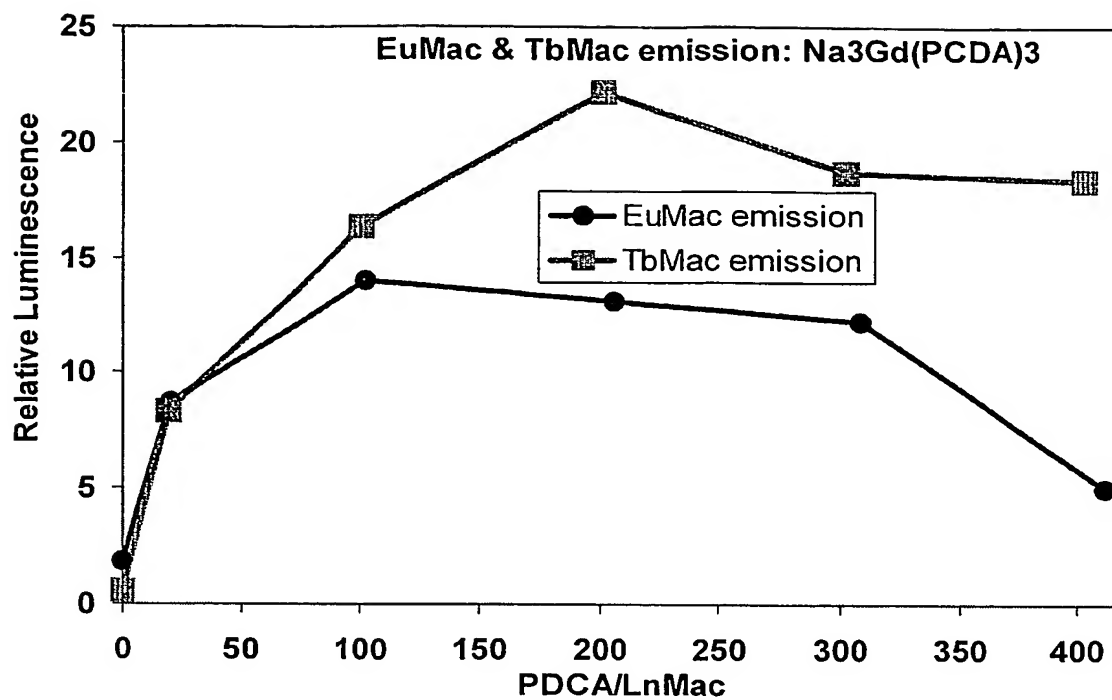


Figure 9b is a graph showing the effect of differing concentrations of Na₃Gd(PCDA)₃ on the luminescence of two different lanthanide macrocycles.

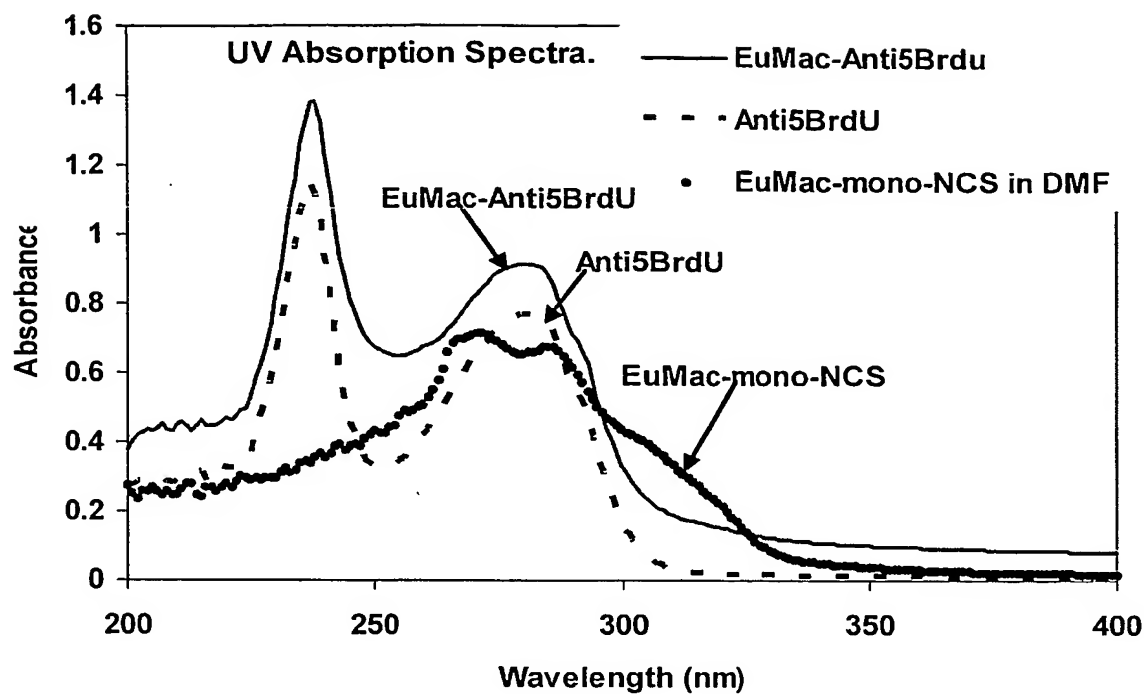


Figure 10 is a graphical presentation of the ultraviolet absorption spectra of the EuMac-mono-NCS, the EuMac coupled to anti-5-BrdU, and anti-5-BrdU.

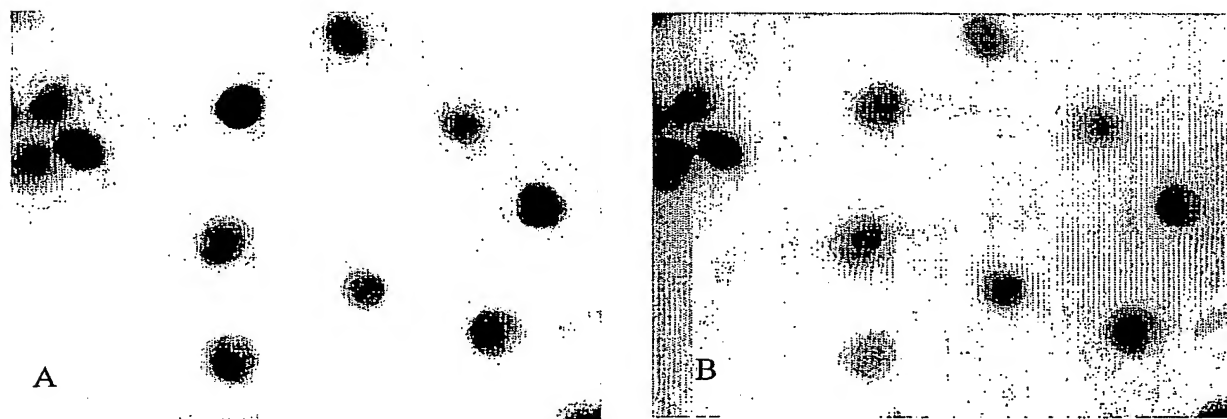


Figure 11 is a pair of inverted images of EuMac-di-NCS stained cells. A is a 5 second exposure; B is the summation of 1000 time-gated images, each exposed for 2 msec.

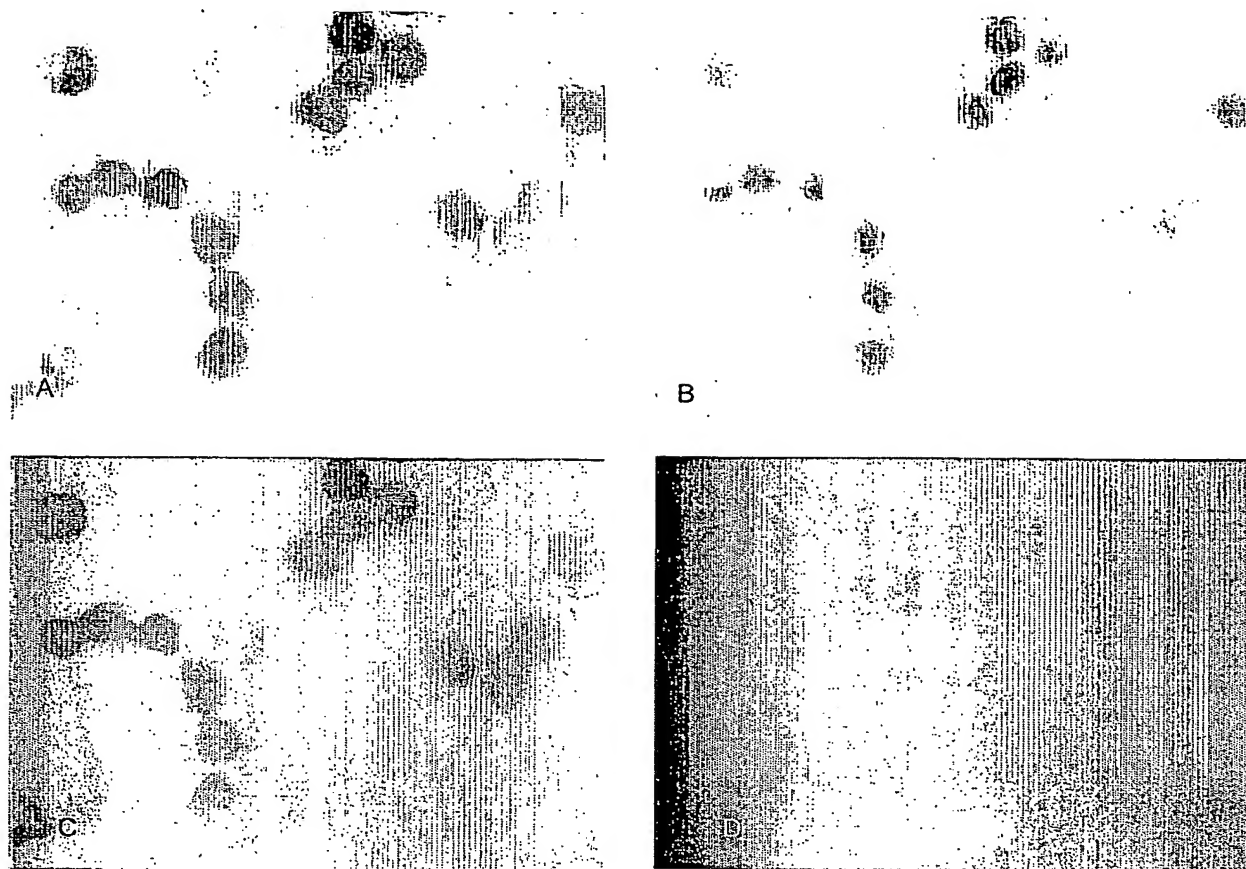


Figure 12 shows four images of a single preparation of nonapoptotic cells stained with both EuMac and DAPI.

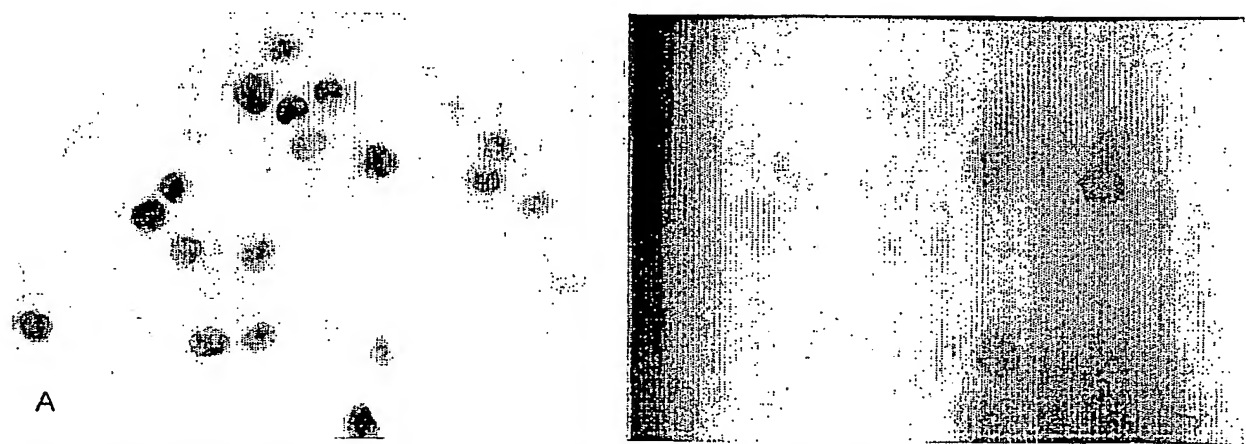


Figure 13 shows two inverted images of cells stained with SmMac-di-NCS and DAPI.

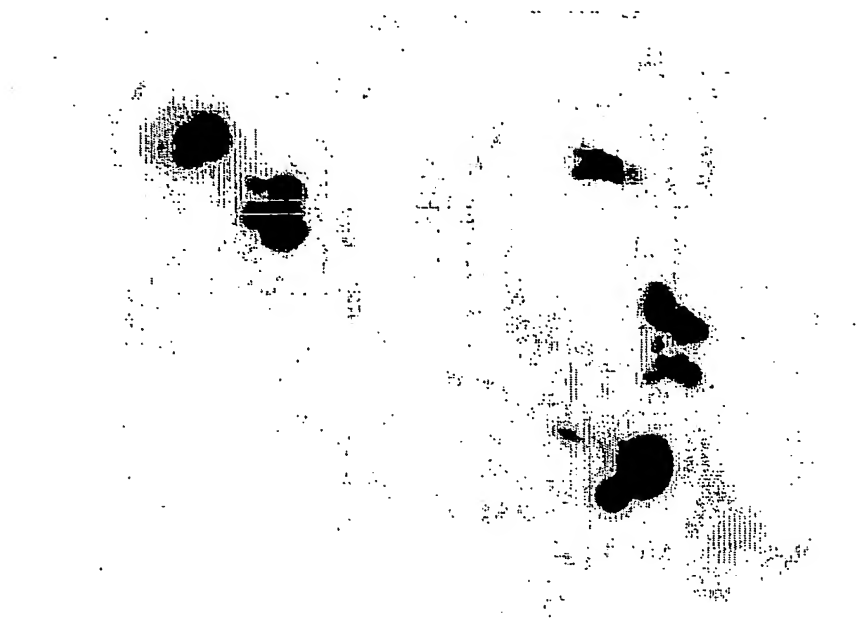


Figure 14 is an inverted image of directly stained apoptotic cells.

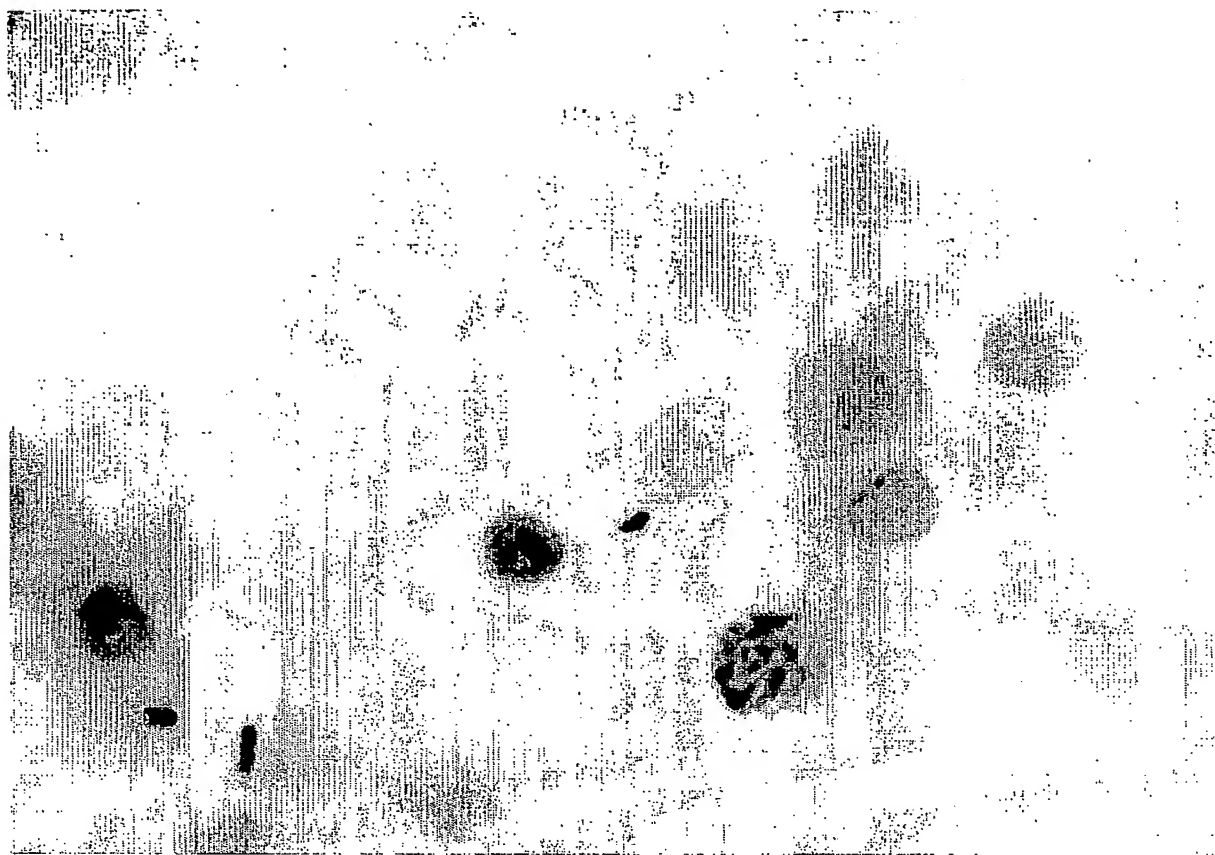


Figure 15 is an inverted image of EuMac-anti-5-BrdU stained cells in S phase.



Figure 16 is an inverted image of EuMac-Streptavidin stained apoptotic cells.

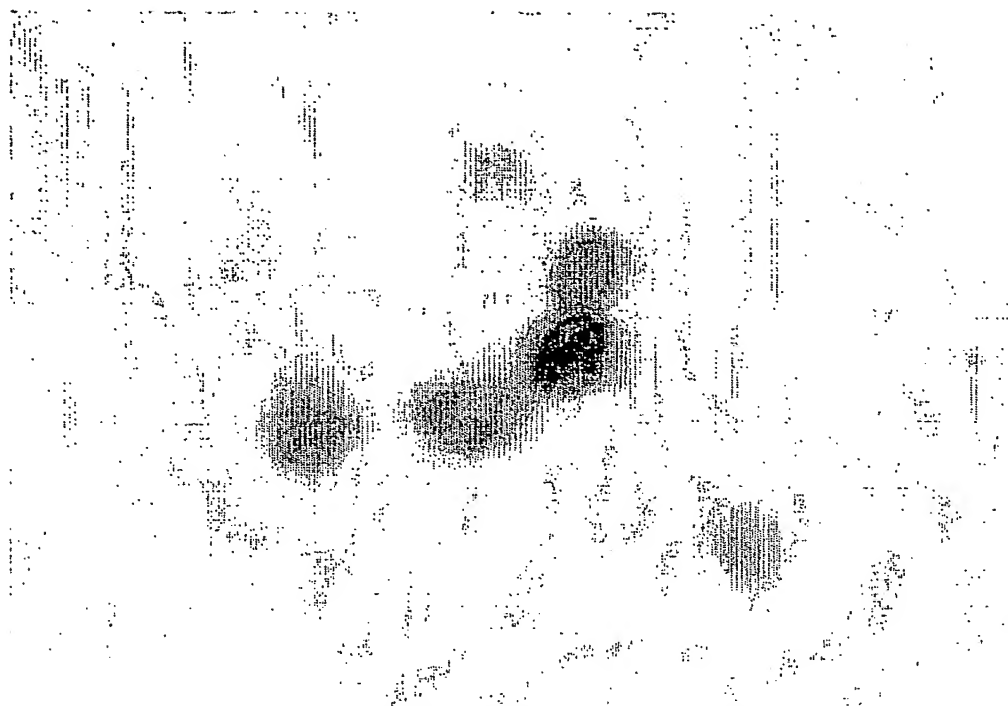


Figure 17 is an inverted image of EuMac-Streptavidin stained cells in S phase.

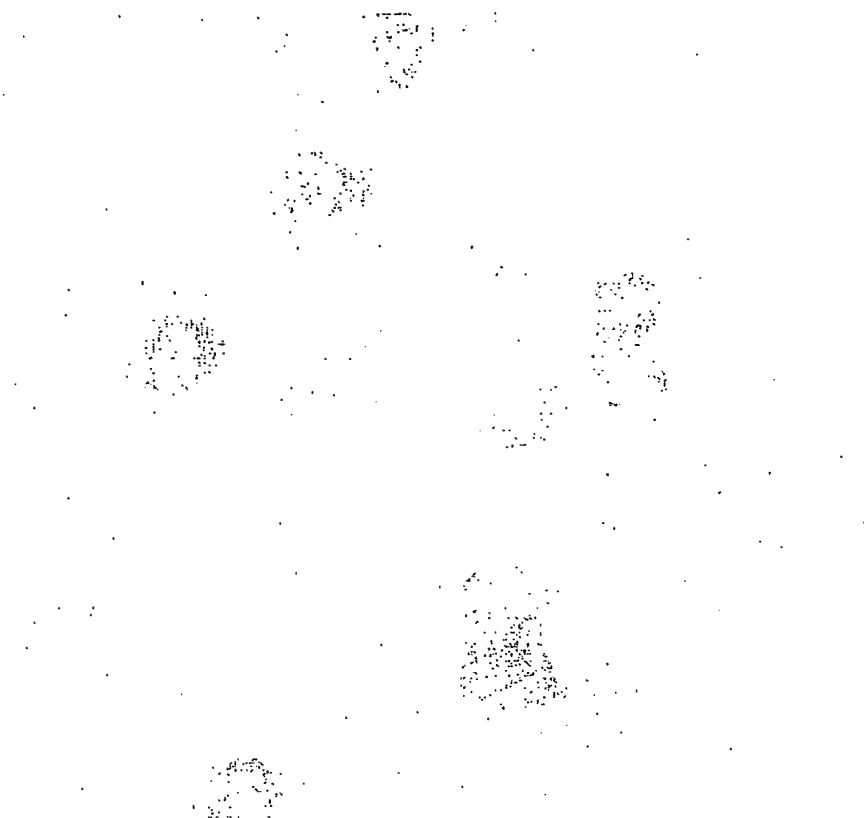


Figure 18 is an inverted image of two photon excited EuMac-di-NCS stained cells.

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